women, neither leisure time physical activity nor physical work load showed any consistent relationship with incidence of severe knee or hip osteoarthritis, defined as arthroplasty due to osteoarthritis.

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SEVERITY OF RADIOGRAPHIC HAND OSTEOARTHRITIS PREDICTS A SMALL INCREASE IN HAND PAIN AND FUNCTIONAL LIMITATION AT 3-YEARS

M. Marshall, D. van der Windt, E. Nicholls, H. Myers, K. Dziedzic
Keele Univ., Staffordshire, United Kingdom

Purpose: To examine whether severity of radiographic hand osteoarthritis (OA) at baseline predicts an increase in hand pain and functional limitation at 18-months and 3-years follow-up in a group of community-dwelling older adults with hand pain.
Methods: The Clinical Assessment Study of the Hand (CAS-HA) is a prospective population-based cohort of 623 adults aged 50 years and over with self-reported hand pain or hand problems. Dorsi-palmar x-rays of the hands were obtained at baseline and 16 joints in each hand were scored systematically for the presence of OA using the Kellgren and Lawrence (K&L) grading system. Participants were grouped according to radiographic severity: no OA (K&L2). Hand pain and function were assessed by AUSCAN pain and function subscales. Follow-up by postal survey was undertaken at 18-months and 3-years, where participants repeated the AUSCAN pain and function subscales. The mean scores for AUSCAN pain and function were determined for the groups of hand OA severity (unadjusted and adjusted for baseline AUSCAN scores). ANCOVA was used to test differences in outcomes at 18-months and 3-years adjusted for baseline AUSCAN scores.
Results: Of the 623 participants, five did not have x-rays and 26 were excluded with inflammatory arthritis (mean age 64yrs; 62% female). Of those with baseline x-rays 96% (n=567) were followed up at 18 months and 91% (n=537) at 3 years.
At baseline the moderate to severe OA group had significantly more hand pain and functional limitation than the mild OA and no OA groups (Figure 1). The mean pain and function scores for the no OA group showed little change over time, a small increase in pain and functional limitation were seen for the mild and moderate to severe OA group (Figure 1). The moderate to severe OA group had the most pain and functional limitation at both time points. After adjustment for baseline scores the differences between the groups of radiographic severity were statistically significant at 3-years for pain and borderline statistically significant for function (Table 1).

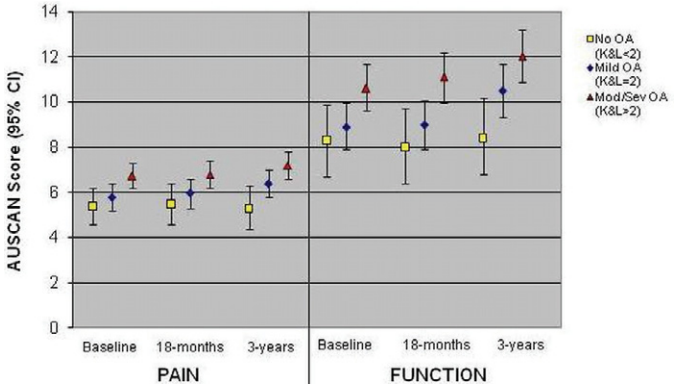

Figure 1. Unadjusted mean scores (95% CI) for AUSCAN pain and function.

Conclusion: Older adults with more severe radiographic hand OA at baseline had more pain and functional limitation, which persisted over a 3-year period. Radiographic hand OA at baseline was associated with a modest increase in hand pain and a steady decline in function over time.

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PREVALENCE OF SYMPTOMATIC KNEE AND HIP OA: A POPULATION BASED SURVEY IN FRANCE

F. Guillemin[1], **A.-C. Rat**[2], B. Mazières[3], J. Pouchot[4], L. Euller Ziegler[5], B. Fautrel[6], P. Fardellone[7], J. Morvan[8], C. Roux[5], E. Verrouil[9], A. Saraux[10], J. Coste[11]
[1]INSERM, CIC-EC CIE6, Nancy-Université, Paul Verlaine Metz, Paris Descartes, EA 4360 Apemac, Vandoeuvre Les Nancy, France; [2]Nancy-Univ., Vandoeuvre Les Nancy, France; [3]Toulouse-Univ., Toulouse, France; [4]Nancy-Université, Paul Verlaine Metz, Paris Descartes, EA 4360 Apemac, Paris, France; [5]Nice-Univ., Nice, France; [6]Paris-Univ., Paris, France; [7]INSERM ERI 12, Amiens, France; [8]Quimper Hosp., Quimper, France; [9]Toulouse Univ., Toulouse, France; [10]Brest-Univ., Brest, France; [11]3Nancy-Université, Paul Verlaine Metz, Paris Descartes, EA 4360 Apemac, Paris, France

Purpose: Although osteo-arthritis (OA) is a major public health problem, there is a lack of epidemiological data in Europe. The aim of our study was to estimate the prevalence of symptomatic knee and hip OA in a multiregional representative sample in France.
Methods: A two phase survey was designed. Using a random digit dialing phone survey, subjects 40 to 75 years old were screened with a validated questionnaire. In case of a positive screening question (presence of at least one of the listed characteristic symptoms), subjects were invited to participate to the confirmation phase including physical examination and hip or/and knee X-rays. Cases were all the subjects with symptoms suggestive of symptomatic knee or hip OA according to the clinical examination and X-rays (Kellgren-Lawrence stage $\geq$2). Prevalence was determined using multiple imputation to account for refusals at different phases in order to obtain more accurate estimates and to limit non-response bias. Estimates were also corrected to account for the sensitivity error of the screening questionnaire. Standardised prevalence estimates were further calculated based on age and sex distribution according to national census data 2006 (INSEE)
Results: The prevalence survey, conducted in 6 regions started in April 2007. In two years, 63 232 homes answered a phone call and 27 632 had at least one subject aged between 40 and 75 years old. Among them, screening detected 9621 positive subjects, of which 3707 (39%) participated fully to the confirmation phase. Reasons for non participation in the latter phase included: 514 subjects not reached for setting visit in the clinic, 3389 refusals and 933 subjects who did not show up at the scheduled visit. Among subjects having completed the whole ascertainment procedure, 1010 had a symptomatic OA: 317 hips, 756 knees.
Participation was different according to region, age, sex, socio-professional category and the different items of the screening questionnaire. Missing data were mostly not at random. Multiple imputation of all eligible subjects accounted for these characteristics: corrected estimates of the prevalence are given by joint, sex and age in the table.

Table 1. Estimates of the prevalence according to joint, age and sex

	Men		Women	
	Knee % [IC 95%]	Hip % [IC 95%]	Knee % [IC 95%]	Hip % [IC 95%]
40-49 years	2.1 [0.9;3.8]	1.0 [0.3;1.9]	1.1 [0.7;2.6]	0.8 [0.2;1.4]
50-59 years	4.7 [2.9;7.0]	1.6 [0.6;2.7]	5.3 [4.2;7.5]	2.2 [1.1;3.2]
60-69 years	6.8 [4.5;9.8]	3.2 [1.5;4.9]	9.0 [8.2;12.9]	4.2 [2.6;5.7]
70-75 years	10.1 [6.3;15.2]	3.9 [1.4;6.8]	13.3 [11.4;18.5]	5.1 [2.8;7.5]

Prevalence increases with age and after 50 years old is more frequent among women.

Abstract 347 – Table 1. Adjusted mean scores (95% CI) for AUSCAN pain and function at 18-months and 3-years

	AUSCAN Pain (0-20)			AUSCAN Function (0-36)		
	Baseline	18-months adjusted for baseline score	3-years adjusted for baseline score	Baseline	18-months adjusted for baseline score	3-years adjusted for baseline score
No OA (K&L<2)	5.4 (4.6-6.2)	6.1 (5.3-6.8)	5.9 (5.1-6.6)	8.3 (6.7-9.8)	9.3 (8.1-10.4)	9.8 (8.7-10.9)
Mild OA (K&L=2)	5.8 (5.2-6.4)	6.2 (5.4-6.8)	6.6 (6.1-7.1)	8.9 (7.9-10.0)	9.5 (8.8-10.3)	10.8 (10.1-11.6)
Moderate to severe OA (K&L>2)	6.7 (6.2-7.3)	6.6 (6.1-7.1)	7.0 (6.5-7.5)	10.6 (9.6-11.7)	10.4 (9.6-11.1)	11.4 (10.7-12.1)
Significance (ANOVA/ANCOVA)	p=0.012	p=0.502	p=0.039	p=0.016	p=0.184	p=0.060